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# CHICORY

## CONTROL AND ERADICATION

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# CHICORY: CONTROL AND ERADICATION.

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## DISTRIBUTION OF CHICORY.

**C**HICORY, also known as succory, bunk, blue-sailors, and blue-weed, is a native of Europe which was originally introduced from Holland into Massachusetts in 1785 for use as a green vegetable. It has spread to most of the northern half of the United States, usually by means of seed carried as an impurity in both foreign and domestic grass and clover seed. The increasing number of complaints recently received concerning this weed, especially from Pennsylvania, Virginia, and New York, indicates that the plant is becoming more troublesome. Since chicory frequently becomes pestiferous, farmers should be on their guard to prevent its further spread wherever possible.

## DESCRIPTION.

Chicory is a perennial, living from year to year by means of its thick, heavy, fleshy root. (Fig. 1.) It is a close relative of the common lettuce and dandelion. The plant produces two types of leaves—the basal or root leaves, somewhat resembling dandelion leaves, which are the first to appear, usually in the form of a rosette, and the stem leaves, which are scattered along the flowering stalk. Chicory may be recognized readily by its milky juice and its handsome blue heads, each about an inch in diameter, which bloom during the morning hours but usually are all closed by noon unless the day is cloudy. Although blue is the usual flower color, it varies to pale blue or to pure white, and even pink flowers are found occasionally. When chicory grows on lawns, flowering heads are sometimes produced so close to the ground as to escape the lawn mower. When allowed to grow unrestricted, the flowering stem is from a few inches to 4 feet in height. The deep-seated yellowish perennial root, sometimes growing to a depth of 2 feet or more, is not unlike the root of the parsnip.

Chicory is frequently confused with blue-flowered lettuce, a persisting western weed, from which it may be distinguished readily by the fact that the flowering heads of chicory occur singly and are attached close to the stem, whereas those of blue lettuce occur in groups, each head terminating a separate branch.

## USES.

In Europe chicory is cultivated for the basal leaves, which are used as a potherb, or greens, and for the roots, which are sliced, dried, and pulverized, the product forming the leading coffee substitute and adulterant.

The plant is also used for forage, particularly in pasture mixtures.

When used as greens, the basal or root leaves are cut when young and succulent, boiled in two changes of water in order to remove the bitter principle, then served in a manner similar to dandelions or spinach. The blanched leaves are also utilized as a salad and are considered very wholesome. The young roots are edible after being prepared in a manner similar to parsnips or carrots.



FIG. 1.—Chicory (*Cichorium intybus*). The heavy fleshy root is shown on the left and the flowering stalk on the right. Note the flowers, which are closely attached to the stem, and the heavy root, on top of which is a cluster of basal leaves.

Chicory is utilized in Europe as a pasture plant and as a soiling crop. The plant is especially valuable on poor land, in out-of-the-way places, and on steep slopes. It is said to impart a bitter taste to dairy products, especially if fed in large quantities. Sheep and goats eat the plant freely, but cattle prefer other forage. Hogs eat the roots readily, while horses soon acquire a taste for both the roots and the leaves.

The leaves of chicory are used in Europe to a limited extent in the manufacture of a blue dye.

## ERADICATION AND CONTROL.

Chicory is a weed of fields, gardens, lawns, meadows, and waste places, where its pretty blue flowers are a familiar sight. The plant

exhibits little preference in regard to soil, since it seems to grow equally well upon clay and sandy soils and thrives on very poor land. The heavy root enables the plant to endure severe dry spells and makes chicory a difficult plant to eradicate. Mowing is of little avail, since the roots soon send up new shoots that mature in a short time. Usually chicory makes its first appearance on the farm in the form of a few scattered individuals. At this stage it is particularly important to eradicate the plant, since if allowed to grow unmolested the weed will soon spread and may take possession of entire fields.

*Hand methods.*—Where practicable, as on lawns and in other places where the plants do not occur in large numbers, hand methods are best for removing chicory. The individual plant should be cut below the crown with a spud, hoe, or grub hoe and a handful of salt placed on the newly cut surface to prevent the root from sprouting. A small quantity of either arsenite of soda solution, carbon bisulphid, or kerosene oil will answer the same purpose as salt. Salt is the least expensive, however, and there is no danger of poisoning cattle by its use.

It is sometimes practicable to pull out bodily a large percentage of the smaller plants following spring rains, when the ground is soft. The remaining chicory plants should then be cut and salted. A special instrument devised for pulling docks and other deep-rooted plants is likewise useful for chicory, but usually no instrument is necessary. This work should always be done before seed ripens. Mature seeds are formed during September, continuing through October and November. The best time to locate chicory plants is during the morning hours, when the bright blue flowers are very conspicuous.

In gardens, hand pulling, frequent hoeing, and grubbing are the three most practicable methods.

*Cultivation.*—When the weed infests such large areas as to render hand methods impracticable, eradication is best accomplished by growing a tilled crop, such as corn or potatoes, for at least two years.

*Grazing.*—The use of sheep and goats to graze chicory in infested meadows and pastures is very helpful.

*Improving the soil.*—Chicory thrives on poor land; if such soil is fertilized there is a tendency for the weed to disappear.

*Chemical plant poisons.*—The use of chemical plant poisons applied as sprays, etc., is generally not advisable except for scattered plants, as considered under "Hand methods."

*Use pure seed.*—Since chicory is commonly introduced by means of impure grass, clover, and other forage-crop seeds, the importance of using pure seed can not be overstated.



